

What Is Claimed Is:

1. An SPR sensor plate, comprising:

an optical waveguide for allowing light from a light source to pass therethrough; and a sensing metal film formed
5 on part of a surface of the optical waveguide,

wherein said optical waveguide has reflecting metal films formed on opposite end surfaces thereof except for a light incident surface and a light exit surface, and

at least one of said incident surface and exit surface
10 is inclined through a predetermined inclination.

2. The SPR sensor plate according to Claim 1, further comprising at least two sets of said incident surface and the corresponding exit surface.

3. The SPR sensor plate according to Claim 1, wherein said incident surface and the corresponding exit surface are formed on a same end surface side.

4. The SPR sensor plate according to Claim 1, wherein said incident surface and the corresponding exit surface are formed on different end surface sides.

5. The SPR sensor plate according to Claims 1, wherein said inclined surfaces have a same inclination.

6. The SPR sensor plate according to Claims 1, wherein said reflecting metal films are parallel with one another.

7. The SPR sensor plate according to Claims 1, wherein said sensing metal film is formed of Au, Ag, or Ni.

8. The SPR sensor plate according to Claim 7, wherein said sensing metal film is formed in said optical waveguide via a Cr film.

9. The SPR sensor plate according to Claims 1, wherein said reflecting metal film is formed of Au, Ag, or Al.

10. The SPR sensor plate according to Claims 1, wherein a hydrophobic film is formed around said sensing metal film constituting a part of the surface of said optical waveguide.

11. The SPR sensor plate according to Claim 10, wherein said hydrophobic film is a fluorine-based resin film.

12. An immune reaction measuring instrument using an SPR sensor plate according to Claims 1.

13. The immune reaction measuring instrument according to Claim 12, comprising at least two of said SPR sensor plates.